Abstract

A product review is needed by a customer before he buys a product. Currently, several platforms can be used to provide product reviews, one of which is the beauty product. Every customer can read beauty product reviews, not only from one aspect of the review but it can be from several aspects of the review. it is difficult for consumers to find all the reviews from various aspects quickly. Therefore, in this study, a combination of LDA modeling methods and Word Embedding Word2vec were used, to obtain sentiments from each of the predetermined aspects of the review. In this study, the accuracy of the combination of LDA will be compared with the Word2vec Skip-gram and Continuous-bag-of-word (CBOW) models. From the two combinations, it is found that the combination accuracy of LDA and Word2vec Skip gram is 80.36%, and for CBOW is only 74.37%. Meanwhile, the SVM and K-Fold Cross-Validation algorithms are used to find the accuracy of sentiment predictions on the aspects of price, packaging, and fragrances. Compared to the other two aspects, the packaging aspect has the highest accuracy at 89.71%.

Keywords: Aspect Based Sentiment Analysis, Topic Modelling LDA, Word2vec, Support Vector Machine